At page 6, line 33, after 'mixture of' please delete "oligimers" and insert ---oligomers---.

At page 6, line 34, after 'each' please delete "oligimer" and insert ---oligomer---.

At page 7, line 23, after '450 mOsm/L' please delete "(from Patent 4,879,280)" and insert ---(from US Patent 4,879,280)---.

At page 8, line 6, after 'Area' please delete "Coefficicient" and insert ---Coefficient---.

IN THE CLAIMS

Before calculating the fee for filing the instant Continuation Application, please cancel claims 1 to 37 originally filed in United States Patent Application No. 08/558,472 and add new Claims 38 to 82 as follows:

38. A peritoneal dialysis solution comprising at least one amino sugar in an effective amount sufficient to create an osmotic pressure to effect the removal of water by diffusion from the patient's blood across the peritoneal membrane into the solution.

39. The solution of claim 38 wherein the at least one amino sugar is present at a concentration of up to about 5.0% (w/v).

40. The solution of claim 39 wherein the at least one amino sugar is present as a monomer or as an oligomer of 2 to 12 carbohydrate units.

41. The solution of claim 40 wherein the at least one amino sugar is selected from the group consisting of acetylated amino sugars, deacetylated amino sugars and combinations thereof.

42. The solution of claim 41 wherein the acetylated amino sugar is selected from the group consisting of N-acetylglucosamine, N-acetylgalactosamine, N-acetylmanosamine and combinations thereof and the deacetylated amino sugar is selected from the group consisting of glucosamine, galactosamine, mannosamine and combinations thereof.

43. The solution of claim 42 wherein the acetylated amino sugar is N-acetylglucosamine.

44. The solution of claim 43 further comprising at least one electrolyte in an effective amount sufficient to effect the removal of solutes by diffusion from the patient's blood across the peritoneal membrane into the solution.

45. The solution of claim 44 wherein the at least one electrolyte is selected from the group consisting of sodium, calcium, chloride, magnesium, lactate, malate, acetate, succinate, bicarbonate and combinations thereof.

46. The solution of claim 45 further comprising at least one additional agent selected from the group consisting of glucose, iduronic acid, glucuronic acid and combinations thereof.

47. The solution of claim 46 wherein the at least one amino sugar together with the at least one additional agent is present at a concentration of up to about 5.0% (w/v).

48. The solution of claim 47 wherein

(a) the pH is in the range of about 5.0 to about 7.4;

(b) the osmolarity is greater than 280 mOsm/L;

(c) sodium is present at a concentration in the range of about 115 to about 140 mEquiv/L;

(d) calcium is present at a concentration in the range of about 0.6 to about 5.0 mEquiv/L;

(e) chloride is present at a concentration in the range of about 100 to about 145 mEquiv/L;

(f) magnesium is present at a concentration in the range of about 0 to about 2.0 mEquiv/L; and

(g) lactate, malate, acetate, succinate or bicarbonate is present at a concentration in the range of about 30 to about 45 mEquiv/L.

49. A method of performing peritoneal dialysis comprising the introduction of a peritoneal dialysis solution into the peritoneal cavity of a patient, wherein said peritoneal dialysis solution comprises at least one amino sugar, in an effective amount sufficient to create an osmotic pressure to affect the removal of water by diffusion from the patient's blood across the peritoneal membrane into the solution.

50. The method of claim 49 wherein the at least one amino sugar is present at a concentration of up to about 5.0% (w/v).

51. The method of claim 50 wherein the at least one amino sugar is present as a monomer or as an oligomer of 2 to 12 carbohydrate units.

52. The method of claim 51 wherein the at least one amino sugar is selected from the group consisting of acetylated amino sugars, deacetylated amino sugars and combinations thereof.

53. The method of claim 52 wherein the acetylated amino sugar is selected from the group consisting of N-acetylglucosamine, N-acetylgalactosamine, N-acetylmanosamine and combinations thereof and the deacetylated amino sugar is selected from the group consisting of glucosamine, galactosamine, mannosamine and combinations thereof.

54. The method of claim 53 wherein the acetylated amino sugar is N-acetylglucosamine.

55. The method of claim 54 further comprising at least one electrolyte in an effective amount sufficient to effect the removal of solutes by diffusion from the patient's blood across the peritoneal membrane into the solution.

56. The method of claim 55 wherein the at least one electrolyte is selected from the group consisting of sodium, calcium, chloride, magnesium, lactate, malate, acetate, succinate, bicarbonate and combinations thereof.

57. The method of claim 56 further comprising at least one additional agent selected from the group consisting of glucose, iduronic acid, glucuronic acid and combinations thereof.

58. The method of claim 57 wherein the at least one amino sugar, together with the at least one additional agent is present at a concentration of up to about 5.0% (w/v).

59. The method of claim 58 wherein

(a) the pH is in the range of about 5.0 to about 7.4;

(b) the osmolarity is greater than 280 mOsm/L;

(c) sodium is present at a concentration in the range of about 115 to about 140 mEquiv/L;

(d) calcium is present at a concentration in the range of about 0.6 to about 5.0 mEquiv/L;

(e) chloride is present at a concentration in the range of about 100 to about 145 mEquiv/L;

(f) magnesium is present at a concentration in the range of about 0 to about 2.0 mEquiv/L; and

(g) lactate, malate, acetate, succinate or bicarbonate is present at a concentration in the range of about 30 to about 45 mEquiv/L.

60. A method of treating a patient suffering from renal failure comprising the introduction of a peritoneal dialysis solution into the peritoneal cavity of a patient, wherein said peritoneal dialysis solution comprises at least one amino sugar in an effective amount sufficient to create an osmotic pressure to affect the removal of water by diffusion from the patient's blood across the peritoneal membrane into the solution.

61. The method of claim 60 wherein the at least one amino sugar is present at a concentration of up to about 5.0% (w/v).

62. The method of claim 61 wherein the at least one amino sugar is present as a monomer or as an oligomer of 2 to 12 carbohydrate units.

63. The method of claim 62 wherein the at least one amino sugar is selected from the group consisting of acetylated amino sugars, deacetylated amino sugars and combinations thereof.

64. The method of claim 63 wherein the acetylated amino sugar is selected from the group consisting of N-acetylglucosamine, N-acetylgalactosamine, N-acetylmanosamine and combinations thereof and the deacetylated amino sugar is selected from the group consisting of glucosamine, galactosamine, mannosamine and combinations thereof.

65. The method of claim 64 wherein the acetylated amino sugar is N-acetylglucosamine.

66. The method of claim 65 further comprising at least one electrolyte in an effective amount sufficient to effect the removal of solutes by diffusion from the patient's blood across the peritoneal membrane into the solution.

67. The method of claim 66 wherein the at least one electrolyte is selected from the group consisting of sodium, calcium, chloride, magnesium, lactate, malate, acetate, succinate, bicarbonate and combinations thereof.

68. The method of claim 67 further comprising at least one additional agent selected from the group consisting of glucose, iduronic acid, glucuronic acid and combinations thereof.

69. The method of claim 68 wherein the at least one amino sugar, together with the at least one additional agent is present at a concentration of up to about 5.0% (w/v).

70. The method of claim 69 wherein

(a) the pH is in the range of about 5.0 to about 7.4;

(b) the osmolarity is greater than 280 mOsm/L;

(c) sodium is present at a concentration in the range of about 115 to about 140 mEquiv/L;

(d) calcium is present at a concentration in the range of about 0.6 to about 5.0 mEquiv/L;

(e) chloride is present at a concentration in the range of about 100 to about 145 mEquiv/L;

(f) magnesium is present at a concentration in the range of about 0 to about 2.0 mEquiv/L; and

(g) lactate, malate, acetate, succinate or bicarbonate is present at a concentration in the range of about 30 to about 45 mEquiv/L.

71. A method of reducing at least one complication associated with peritoneal dialysis, said method comprising the introduction of a peritoneal dialysis solution into the peritoneal cavity of a patient, wherein said peritoneal dialysis solution comprises at least one amino sugar, in an effective amount sufficient to create an osmotic pressure to affect the removal of water by diffusion from the patient's blood across the peritoneal membrane into the solution.

72. The method of claim 71 wherein the at least one complication associated with peritoneal dialysis is selected from the group consisting of:

(i) morphological and functional deterioration of the peritoneal membrane;

(ii) peritonitis;

(iii) adverse metabolic consequences and related cardiovascular disease;

(iv) protein malnutrition

and combinations thereof.

73. The method of claim 72 wherein the at least one amino sugar is present at a concentration of up to about 5.0% (w/v).

74. The method of claim 73 wherein the at least one amino sugar is present as a monomer or as an oligomer of 2 to 12 carbohydrate units.

75. The method of claim 74 wherein the at least one amino sugar is selected from the group consisting of acetylated amino sugars, deacetylated amino sugars and combinations thereof.

76. The method of claim 75 wherein the acetylated amino sugar is selected from the group consisting of N-acetylglucosamine, N-acetylgalactosamine, N-acetylmanosamine and combinations thereof and the deacetylated amino sugar is selected from the group consisting of glucosamine, galactosamine, mannosamine and combinations thereof.

77. The method of claim 76 wherein the acetylated amino sugar is N-acetylglucosamine.

78. The method of claim 77 further comprising at least one electrolyte in an effective amount sufficient to effect the removal of solutes by diffusion from the patient's blood across the peritoneal membrane into the solution.

79. The method of claim 78 wherein the at least one electrolyte is selected from the group consisting of sodium, calcium, chloride, magnesium, lactate, malate, acetate, succinate, bicarbonate and combinations thereof.

80. The method of claim 79 further comprising at least one additional agent selected from the group consisting of glucose, iduronic acid, glucuronic acid and combinations thereof.

81. The method of claim 80 wherein the at least one amino sugar, together with the at least one additional agent is present at a concentration of up to about 5.0% (w/v).

82. The method of claim 81 wherein

(a) the pH is in the range of about 5.0 to about 7.4;

(b) the osmolarity is greater than 280 mOsm/L;

(c) sodium is present at a concentration in the range of about 115 to about 140 mEquiv/L;

(d) calcium is present at a concentration in the range of about 0.6 to about 5.0 mEquiv/L;

(e) chloride is present at a concentration in the range of about 100 to about 145 mEquiv/L;

(f) magnesium is present at a concentration in the range of about 0 to about 2.0 mEquiv/L; and

(g) lactate, malate, acetate, succinate or bicarbonate is present at a concentration in the range of about 30 to about 45 mEquiv/L.